

MARKETING RESEARCH DEPARTMENT REPORT

81025

MRD # : _____

DATED: August 20, 1981

WRITTEN BY: Jerry Isaacs

SUBJECT: HTI Test of an Experimental Merit Ultra Lights
100 mm Model Versus Production Cambridge 100 mm
(Project No. 4804/5146)

OVERVIEW

Overall, the low tar 100 mm NMF smokers significantly preferred the Merit Ultra Lights 100 mm Model (5.0 mg tar) (74%) to Production Cambridge 100 (3.4 mg tar) (26%). Qualitatively, these smokers perceived Merit Ultra Lights 100 as having "more taste", "better taste", "easier draw", "better aftertaste", "a better filter", and being "cooler".

DISTRIBUTION:

H. Daniel (Rich.)
F. Daylor (Rich.)
T. Goodale
W. McDowell
L. Meyer (Rich.)
J. Morgan
S. Pollack
G. Raed
F. Resnik
R. Seligman (Rich.)
A. Udow
J. Zoler ✓

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FILE: MERIT

HTI TEST OF AN EXPERIMENTAL
MERIT ULTRA LIGHTS 100 MM MODEL VERSUS
PRODUCTION CAMBRIDGE 100 MM

BACKGROUND

The purpose of this test was to determine the consumer acceptability of an experimental Merit Ultra Lights 100 mm Model relative to production Cambridge 100 mm. Analytically, the two products differed in that the Merit Ultra Lights had a higher tar delivery (5.0 vs. 3.4 mg.). This test was conducted via mail placement/mail questionnaire among low-tar 100 mm NMF smokers. Both products were tested "blind" in plain white coded packages.

FINDINGS

Low Tar 100 mm NMF Smokers

1. Among low tar 100 mm NMF smokers, the overall preference vote was 74% for the experimental Merit Ultra Lights 100 mm model versus 26% for production Cambridge 100 mm. This vote, which is significant at the 95% level, was consistent across all demographic subgroups.

(See Table 1, Sections A & B)

2. The average ratings assigned by these smokers on a "worst" (0) to "best" (100) scale are consistent with the overall preference vote in that the Merit Ultra Lights model (49.03) was rated significantly (at the 95% level) higher than production Cambridge 100 (33.44).

(See Table 1; Section C)

3. A review of the available qualitative information (Comparisons - Table 1; Section D; Reasons For Preference - Table 2; and Dislikes - Table 3) indicates that these low tar smokers perceived Merit Ultra Lights 100 as having "more taste", "better taste", "easier draw", "better aftertaste", "a better filter" and being "cooler". Production Cambridge 100 was perceived as being "milder".

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	N =	Smokers Of: Low-Tar 100 mm NMF (304) %
Prefer Production Cambridge 100		21 (26)
Prefer Experimental Merit Ultra Lights 100		59* (74)
No Preference		20

SECTION B: % PREFERRING EXPERIMENTAL
(Percentage Among Those Having A. Preference)

	Base (242)	% Preferring Merit Ultra Lights 100 74*
Total		
Men	(66)	77*
Women	(176)	73*
Under 35 years	(72)	76*
35 years and over	(170)	73*
Moderate/light smokers	(175) (67)	75* 72*

SECTION C: AVERAGE RATINGS
(0=Worst; 100=Best)

	Smokers Of: Low-Tar 100 NMF (304)
Prefer Production Cambridge 100	33.44
Prefer Experimental Merit Ultra Lights 100	49.03*

SECTION D: COMPARISON FOR SPECIFIC QUALITIES (%)

	Smokers Of Low Tar 100 mm NMF		
	Production Cambridge 100	Merit Ultra Lights 100	No Difference
N =	(304)		
Has more taste	20	58*	23
Has a better taste	20	55*	25
Is harsher to the mouth/throat	24	17	59
Has an easier draw	13	52*	35
Has a better aftertaste	17	35*	48
Is cooler	17	25**	58
Is slower burning	26	21	53
Is milder	42*	26	32
Has a better filter	7	20*	72
Has a lighter taste	36	23	36

* Significant at the 95% confidence level.

**Significant at the 90% confidence level.

TABLE I

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REASONS FOR PREFERENCE

	<u>Smokers Of Low Tar 100 mm NMF</u>	
	<u>Preferred Cambridge</u>	<u>Preferred Merit Ultra Lights</u>
Base: Those preferring either cigarette	(63) #	(179) #
<u>Taste</u>	<u>48</u>	<u>117</u>
Good taste/tobacco flavor	22	49
Strong flavor	14	42
Good aftertaste/no bad aftertaste	9	16
Mild flavor/not harsh	5	14
<u>Strength</u>	<u>18</u>	<u>29</u>
Mild, not strong	16	18
Stronger	1	9
<u>Burning Qualities</u>	<u>11</u>	<u>18</u>
Slower burning	10	11
<u>Ease In Smoking</u>	<u>10</u>	<u>80</u>
Easy draw, smoke	8	74
Even drawing	2	7
<u>Filter</u>	<u>3</u>	<u>6</u>
<u>Effect On Mouth and Throat</u>	<u>2</u>	<u>7</u>
<u>Physical Characteristics</u>	<u>1</u>	<u>4</u>
<u>Coolness</u>	<u>1</u>	<u>1</u>
<u>Miscellaneous</u>	<u>4</u>	<u>25</u>
Satisfying	1	11
Similar/same as regular brand	--	7

TABLE 2

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DISLIKES ABOUT EACH CIGARETTE

Base:	Smokers Of Low Tar 100 mm NMF	
	Cambridge 100	Merit Ultra Lights 100
	----- # -----	----- # -----
<u>Taste</u>	<u>126</u>	<u>83</u>
Flavor too mild/not enough flavor	84	46
Poor flavor/disliked taste/no true tobacco taste	20	16
Left bad aftertaste	17	13
Flavor too strong	5	4
 <u>Difficulty In Smoking</u>	 <u>115</u>	 <u>39</u>
Not easy drawing/didn't smoke well	111	32
 <u>Burning Qualities</u>	 <u>57</u>	 <u>64</u>
Burned too fast	28	59
Didn't burn well	12	2
Didn't stay lit	10	--
 <u>Strength</u>	 <u>35</u>	 <u>29</u>
Too mild	19	18
Too strong, not mild enough	15	11
 <u>Effect On Mouth and Throat</u>	 <u>17</u>	 <u>17</u>
Irritated mouth and throat/burned throat	13	10
 <u>Physical Characteristics</u>	 <u>9</u>	 <u>12</u>
 <u>Coolness</u>	 <u>--</u>	 <u>1</u>
 <u>Miscellaneous</u>	 <u>21</u>	 <u>20</u>
Not satisfying	14	12

TABLE 3

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OVERALL PREFERENCE
WEIGHTED

(4804/5146)

Sample: Low Tar 100 mm NMF Smokers -

	Actual Preference Scores <hr/> (304) %	Weighted Preference Scores <hr/> (304) %
Preferred Production Cambridge 100	21	20
Preferred Merit Ultra Lights 100 Model	59	60
No Preference	20	20

Weighted Procedure:

- Equal treatment for orders of trial.
- Incoming sample weighted to age within sex profile for corresponding sample composition.

APPENDIX
TABLE A

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COMPARISON FOR SPECIFIC VALUES
(4804/5146)

Smokers Of:			
Low Tar 100 mm NMF Cigarettes			
Traditional Analysis		Budne Analysis	
Production	MUL 100	Production	MUL 100
Cambridge 100	Model	Cambridge 100	Model
Has more taste	*		*
Has a better taste	*		
Is harsher to mouth/throat	NS	NS	
Has an easier draw	*		*
Has a better aftertaste	*	NS	
Is cooler	**	NS	
Is slower burning	NS	*	
Is milder	*	*	
Has a better filter	*		*
Has a lighter taste	NS	*	

NS = Not Significant

* Significant at the 95% confidence level.

** Significant at the 90% confidence level.

APPENDIX
TABLE B

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FROM: Elizabeth Chambers /

SUBJECT: HTI 4804/5146
Requested by L. Fondren

4804 = M1BL = Red S53 and Black W57 = Control Cambridge 100 Cigarettes

5146 = M1BM = Red W57 and Black S53 = Experimental Merit Ultra Lights 100-Cigarettes

The experimental Merit Ultra Lights 100 cigarettes (M1BM) were different from the control Cambridge 100 cigarettes (M1BL) in the following characteristics: tar and nicotine deliveries, puff count, filter efficiency, total and filter RTD, filter dilution, and total alkaloids.

	<u>Control</u>	<u>Experimental</u>
	<u>Cambridge 100</u>	<u>Merit Ultra Lights 100</u>
IBM Code	M1BL	M1BM
HTI#	4804	5146
<u>Smoke</u>		
Butt Length, mm	39	39
FTC Tar, mg/cigt.	3.4	5.0
Nicotine, mg/cigt.	0.30	0.37
Puffs/cigt.	9.4	8.0
Filtration Eff., %	70	65
<u>Cigarette</u>		
Total RTD, in. of H ₂ O	5.5	4.9
Static Burn. Time, min.	6.5	6.0
Length, mm	99.7	99.7
Circumference, mm	24.7	24.6
<u>Paper</u>		
Additive, type	Cit.	Cit.
Porosity, sec.	14	12
<u>Filter</u>		
RTD, in. of H ₂ O	6.6	5.9
Length, mm	31.6	31.6
Weight, g	0.23	0.22
Tipping paper length, mm	36	36
Dilution, %	62	52
<u>Filler</u>		
Total alkaloids, %	1.98	1.76
Total reducing sugars, %	3.8	3.6
Wt. of tob., g	0.670	0.661
Rod Density, g/cc	0.203	0.202

EC:rrs

cc: Mr. B. A. Soyars
Dr. R. B. Seligman
Mr. W. G. Lloyd
Dr. W. F. Cannon
Mr. L. F. Meyer

Mr. T. T. Goodale
Mr. J. Zoler
Mr. G. F. Raed
Mr. J. S. Osmalov
Mr. F. L. Daylor

Mr. H. G. Daniel
Mr. H. L. Spielberg
Mr. P. N. Gauvin
Mr. W. G. Houck
Mr. S. R. Wagoner
Ms. L. Fondren

Elizabeth Chambers

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